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Title: MOULDING PROCESS

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

**Listing of Claims** 

1. (Currently Amended) A method of producing a plurality of soft contact lenses

comprising the steps of:

providing a sheet of solid, substantially dry material: A.

B. forming said material into a plurality of shaped lens blanks through

controlled application of physical force to the material by compression of the material

between a plurality of form or platen pairs arranged in an array to simultaneously press

together the material into a plurality of shaped lens blanks two forms or platens in a

process selected from the group comprising consisting of thermoforming, or vacuum

forming, or pressing, or hot moulding, or cold moulding, or and compression moulding;

and

C. hydrating said plurality of shaped lens blanks;

wherein at least immediately subsequently to said physical forming step B, said

plurality of shaped lens blanks remain at least partially attached to the sheet of material

and the sheet is used as a transport medium or carrying mechanism for said plurality of

shaped lens blanks.

2. (Original) A method of producing a plurality of soft contact lenses according to claim

1, wherein said sheet of solid substantially dry material is water soluble above a certain

temperature, and formed into said plurality of shaped lens blanks at a temperature below

said certain temperature.

3. (Original) A method of producing a plurality of soft contact lenses according to claim

2, in which said certain temperature is approximately 50°C.

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4. (Original) A method of producing a plurality of soft contact lenses according to claim

2, in which said certain temperature is approximately 65°C.

5. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which the said material is chosen from the group consisting of

polyvinyl alcohol or a copolymer of polyvinyl alcohol and polyvinyl acetate or

polyethylene-maleic-anhydride or polymethyl-hydroxy-propyl-cellulose or copolymers

of methyl acrylate or ethyl acrylate with ethylene or their hydroxyl derivatives.

6. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which said material is a copolymer of polyvinyl alcohol and

polyvinyl acetate where the degree of hydrolysis, as measured by saponification, is at

least 96% mol based on the original polyvinyl alcohol.

7. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which said material is a substantially uncrosslinked polymer

comprising crosslinkable groups and in which, prior to the hydration step C, high energy

is applied to said plurality of shaped lens blanks, whereby said polymer is crosslinked to

a predetermined, desired crosslink density.

8. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 7, in which the material contains additives that react to the application

of high energy to improve crosslinking efficiency.

9. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 7, in which the application of high energy involves irradiation of the

plurality of shaped lens blanks by a form of high energy chosen from the group

consisting of electron beam irradiation or gamma irradiation or microwave irradiation or

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ultraviolet irradiation or infrared irradiation or thermal irradiation or ultrasound

irradiation.

10. (Canceled)

11. (Canceled)

12. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, wherein said plurality of shaped lens blanks are fully removed from

the sheet at a stage after step B by the use of a laser cutting device.

13. (Canceled)

14. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which said physical forming step B comprises the following

substeps:

B.1 heating said material to a temperature that:

a) is near to the softening temperature of the material, whereby

thermoforming of said material is possible, but

b) is below the melting point of said material, whereby the physical integrity

of said material is maintained; and

B.2 thermoforming said plurality of shaped lens blanks through application of

physical force to said material.

15. (Original) A method of producing a plurality of soft contact lenses according to

claim 14, in which said thermoforming sub-step involves compression of the material

between two forms or platens.

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16. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which the physical forming step B involves the use of moulds

and said material is placed between said moulds which are pressed together to form said

plurality of shaped lens blanks.

17. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which high energy is applied to said plurality of shaped lens

blanks and/or to said plurality of soft contact lenses in order to sterilise them.

18. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 17, in which the application of high energy involves irradiation by a

form of high energy chosen from the group consisting of electron beam irradiation or

gamma irradiation or microwave irradiation or ultraviolet irradiation.

19. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, which comprises the further step of:

D. transferring the plurality of shaped lens blanks to a plurality of final packs.

20. (Original) A method of producing a plurality of soft contact lenses according to

claim 19, in which, before the transferring step D, the final packs are sterilised.

21. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 20, in which, either before or after the transferring step D, aseptic or

sterile solution is added to the sterile final packs which solution acts to hydrate the lenses

in step C.

22. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 19, in which the material of the shaped lens blanks undergoes a

chemical reaction in the final packs.

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23. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, in which all process steps subsequent to step B are carried out

without further human contact or handling.

24. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, which method is automated or semi-automated to run in a

continuous or semi-continuous manner.

25. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 1, which further involves quality control inspections on the shaped

lens blanks only.

26. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 25, which involves either visual quality control inspections or quality

control inspections using an optical system.

27-43. (Canceled)

44. (Previously Presented) A method of producing a plurality of soft contact lenses

according to claim 22, in which the material undergoes a hydrolysis reaction in the final

packs.